

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
(DO/EO/US)

In re national phase of:

Applicant(s): Morito AKIYAMA, et al.  
Serial No.: 10/556,663  
Filing Date: November 11, 2005  
Art Unit: 2811  
Examiner: Not Yet Assigned  
Title of Invention: WURTZITE THIN FILM, LAMINATE CONTAINING WURTZITE CRYSTALLINE LAYER AND THEIR MANUFACTURING METHODS

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed except for: (a) pending applications or (b) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120:

Serial No.: \_\_\_\_\_  
Filing Date: \_\_\_\_\_

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):

- (a) \_\_\_\_ Copy of each English language version of a search report indicating the degree of relevance found by the foreign office of each document being submitted from the search report.
- (b) \_\_\_\_ Attached English translation of relevant portions.

3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):

- (a) \_\_\_\_ Within 3 months of the filing date, date of entry into the National Stage, or filing date of CPA.
- (b) X Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988 for consideration of this Statement.
- (c) \_\_\_\_ Before the mailing date of a first Office Action on the merits after a first or second submission after final rejection under 37 C.F.R. 1.129(a).

(d) \_\_\_\_ After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance.

(1) \_\_\_\_ The required certification is given below, or

(2) \_\_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or

(3) \_\_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988

(e) \_\_\_\_ After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below.

(1) \_\_\_\_ Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p), or

(2) \_\_\_\_ Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988.

4. Certification (if applicable)

(a) \_\_\_\_ The undersigned hereby certifies that each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement.

(b) \_\_\_\_ The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the undersigned's knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement.

5. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 18-0988.

Respectfully Submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By /Mark D. Saralino/  
Mark D. Saralino, Reg. No. 34,243

1621 Euclid Avenue, 19th Floor  
Cleveland, Ohio 44115  
(216) 621-1113

CERTIFICATE OF MAILING, FACSIMILE OR ELECTRONIC TRANSMISSION

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is \_\_\_\_ being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Commissioner for Patents address below.

X being transmitted via the USPTO Electronic Filing System.

/Mark D. Saralino/  
Mark D. Saralino

July 3, 2007  
Date

Form PTO-1449 (Modified)  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	Atty Docket No.	Serial No.
	HARAP0166US	10/556,663
	Applicant: Morito AKIYAMA, et al.	
	Filing Date	Group
	November 11, 2005	2811

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date MM/YYYY	Name	Class	Sub-class	Filing Date if Appropriate

## FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date MM/YYYY	Country	Class	Sub-class	Translation	
						Yes	No

## OTHER ART

Examiner Initial	Author, Title, Date, Pertinent Pages, etc.
	European Search Report for corresponding Application No. 04733100.4 dated June 13, 2007.
	Yoshimori S. et al.; "Synthesis and AES analysis of Nb(NbN)-AlN multilayers by off-axial DC magnetron sputtering"; Physica C, North-Holland Publishing, Amsterdam, NL; Vol. 305, No. 3-4; September 1, 1998; pages 281-284; XP004150807; ISSN: 0921-4535.
	Wang X. et al.; "On the role of laminate architecture in thin film synthesized by ion beam assisted deposition"; Journal of Materials Science Letters, Chapman and Hall Ltd., London, GB; Vol. 19, No. 6; March 15 2000; pages 485-487, XP001005034; ISSN: 0261-8028.
	Lee Si-Hyung et al.; "Growth of highly c-axis textured AlN films on Mo electrodes for film bulk acoustic wave resonators"; Journal of Vacuum Science and Technology A. Vacuum, Surfaces and Films, American Institute of Physics, New York, NY, USA; Vol. 21, No. 1; January 2003; Pages 1-5; XP012006270; ISSN: 0734-2101.
	Kobyakov V.P.; "Fabrication, microstructure and properties of chemical vapour deposited AlN/Mo laminated composites"; Journal of Materials Science Chapman & Hall UK; Vol. 32, No. 16; August 15, 1997; Pages 4347-4353; XP002434516; ISSN: 0022-2461.

EXAMINER	DATE CONSIDERED
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**Information Disclosure Statement PTO-1449 (Modified)**

The identification of any reference is not intended to be, and should not be understood as being, an admission that such publication, in fact, constitutes "prior art" within the meaning of applicable law since, for example, a given reference may have a later effective date than first seems apparent or the reference may have an effective date which can be antedated. The "prior art" status of any reference is a matter to be resolved during prosecution.